QP
356
.15
J68

THE JOURNAL

OF

COMPARATIVE NEUROLOGY

FOUNDED BY C. L. HERRICK, 1891

EDITORIAL BOARD

DONALD H. BARRON, Managing Editor
Yale University School of Medicine

DAVID BODIAN
Johns Hopkins University
Baltimore, Maryland

GERHARDT VON BONIN
47 Upland Avenue
Mill Valley, California

ELIZABETH C. CROSBY
University of Alabama
Birmingham, Alabama

CLEMENT A. FOX
Wayne State University
Detroit, Michigan

PINCKNEY J. HARMAN
New Jersey College of
Medicine and Dentistry
Jersey City, New Jersey

TRYPHENA HUMPHREY
University of Alabama
Medical Center
Birmingham, Alabama

JAN JANSEN
University of Oslo
Oslo, Norway

KARL M. KNIGGE
University of Rochester
Rochester, New York

FRED A. METTLER
College of Physicians and Surgeons
Columbia University
New York, New York

SANFORD PALAY
Harvard University
Cambridge, Massachusetts

JERZY E. ROSE
University of Wisconsin
Madison, Wisconsin

VOLUME 126

JANUARY — APRIL 1966

PUBLISHED BY

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

PHILADELPHIA, PA.

Digitized by the Internet Archive
in 2024

https://archive.org/details/the-journal-of-comparative-neurology_1966_126_contents

CONTENTS

No. 1 JANUARY 1966

TRYPHENA HUMPHREY. Davenport Hooker — In Memoriam . . 1

KENNETH R. SMITH, JR., RICHARD W. HUDGENS AND JAMES L. O'LEARY. An Electron Microscopic Study of Degenerative Changes in the Cat Cerebellum after Intrinsic and Extrinsic Lesions 15

M. J. T. FITZGERALD. Perinatal Changes in Epidermal Innervation in Rat and Mouse 37

W. J. C. VERHAART. The Pyramidal Tract of Tupaia, Compared to that in Other Primates 43

J. M. HARRISON AND R. IRVING. Ascending Connections of the Anterior Ventral Cochlear Nucleus in the Rat 51

ZBIGNIEW SREBRO. Electron Microscopic Observations on Vacuolated Neurons in Starved *Rana esculenta* 65

HAJIME MANNEN. Contribution to the Quantitative Study of the Nervous Tissue. A New Method for Measurement of the Volume and Surface Area of Neurons 75

TRYPHENA HUMPHREY. The Development of Trigeminal Nerve Fibers to the Oral Mucosa, Compared with their Development to Cutaneous Surfaces 91

LORENZO A. RODRIGUEZ-PERALTA. Hematic and Fluid Barriers in the Optic Nerve 109

M. C. PRESTIGE. Initial Collaterals of Motor Axons within the Spinal Cord of the Cat 123

No. 2 FEBRUARY 1966

PETER J. HAND. Lumbosacral Dorsal Root Terminations in the Nucleus Gracilis of the Cat. Some Observations on Terminal Degeneration in other Medullary Sensory Nuclei . . 137

ORLANDO J. ANDY AND HEINZ STEPHAN. Septal Nuclei in Primate Phylogeny. A Quantitative Investigation 157

ARTHUR E. JONES. The Lateral Geniculate Complex of the Owl Monkey *Aotes trivirgatus* 171

PER R. FLOOD. A Peculiar Mode of Muscular Innervation in Amphioxus. Light and Electron Microscopic Studies of the so-called Ventral Roots 181

ELIZABETH TABER PIERCE. Histogenesis of the Nuclei Griseum Pontis, Corporis Pontobulbaris and Reticularis Tegmenti Pontis (Bechterew) in the Mouse. An Autoradiographic Study 219

ERIC RINVIK. The Cortico-nigral Projection in the Cat. An Experimental Study with Silver Impregnation Methods 241

DONALD C. ROGERS AND GEOFFREY BURNSTOCK. The Interstitial Cell and its Place in the Concept of the Autonomic Ground Plexus 255

FRANK SCALIA. Some Olfactory Pathways in the Rabbit Brain 285

No. 3 MARCH 1966

E. RAMÓN-MOLINER AND W. J. H. NAUTA. The Isodendritic Core of the Brain Stem 311

JOSEPH ALTMAN AND GOPAL D. DAS. Autoradiographic and Histological Studies of Postnatal Neurogenesis. I. A Longitudinal Investigation of the Kinetics, Migration and Transformation of Cells Incorporating Tritiated Thymidine in Neonate Rats, with Special Reference to Postnatal Neurogenesis in Some Brain Regions 337

J. M. HARRISON AND R. IRVING. The Organization of the Posterior Ventral Cochlear Nucleus in the Rat 391

EDWARD C. TARLOV AND ROBERT Y. MOORE. The Tectothalamic Connections in the Brain of the Rabbit 403

G. PATRIZI AND B. L. MUNGER. The Ultrastructure and Innervation of Rat Vibrissae 423

B. J. SMITH. The Structure of the Central Nervous System of the Slug *Arion ater* L., with Notes on the Cytoplasmic Inclusions of the Neurons 437

HUMBERTO CRAVIOTO. Filamentous and Tubular Structures in Mammalian Axoplasm. An Electron Microscopic Study .. 453

LARS GYLLENSTEN, TORBJÖRN MALMFORS AND MARIE-LOUISE NORRLIN. Growth Alteration in the Auditory Cortex of Visually Deprived Mice 463

J. COURVILLE AND A. BRODAL. Rubro-cerebellar Connections in the Cat: An Experimental Study with Silver Impregnation Methods 471

No. 4 APRIL 1966

ROBERT P. EAGER AND RUSSELL J. BARRNETT. Morphological and Chemical Studies of Nauta-stained Degenerating Cerebellar and Hypothalamic Fibers 487

F. MORIN, D. T. KENNEDY AND E. GARDNER. Spinal Afferents to the Lateral Reticular Nucleus. I. An Histological Study 511

M. A. GEREBTZOFF AND M. GOFFART. Cytoarchitectonic Study of the Isocortex in the Sloth (*Choloepus hoffmanni* Peters) 523

M. MEULDERS, J. GYBELS, J. BERGMANS, M. A. GEREBTZOFF AND M. GOFFART. Sensory Projections of Somatic, Auditory and Visual Origin to the Cerebral Cortex of the Sloth (*Choloepus hoffmanni* Peters) 535

THOMAS GREENE AND ROBERT JAMPEL. Muscle Spindles in the Extraocular Muscles of the Macaque 547

ROBERT P. EAGER. Patterns and Mode of Termination of Cerebellar Cortico-nuclear Pathways in the Monkey (*Macaca mulatta*) 551

IRA DWIGHT HOGG. Observations of the Development of the Nucleus of Edinger-Westphal in Man and the Albino Rat 567

JONATHAN STONE. The Naso-temporal Division of the Cat's Retina 585

JONATHAN STONE AND SANDRA M. HANSEN. The Projection of the Cat's Retina on the Lateral Geniculate Nucleus 601

D. C. ROGERS AND G. BURNSTOCK. Multiaxonal Autonomic Junctions in Intestinal Smooth Muscle of the Toad (*Bufo Marinus*) 625

W. R. HAYHOW. The Accessory Optic System in the Marsupial Phalanger, *Trichosurus vulpecula*. An Experimental Degeneration Study 653

INDEX TO VOLUME 126 673